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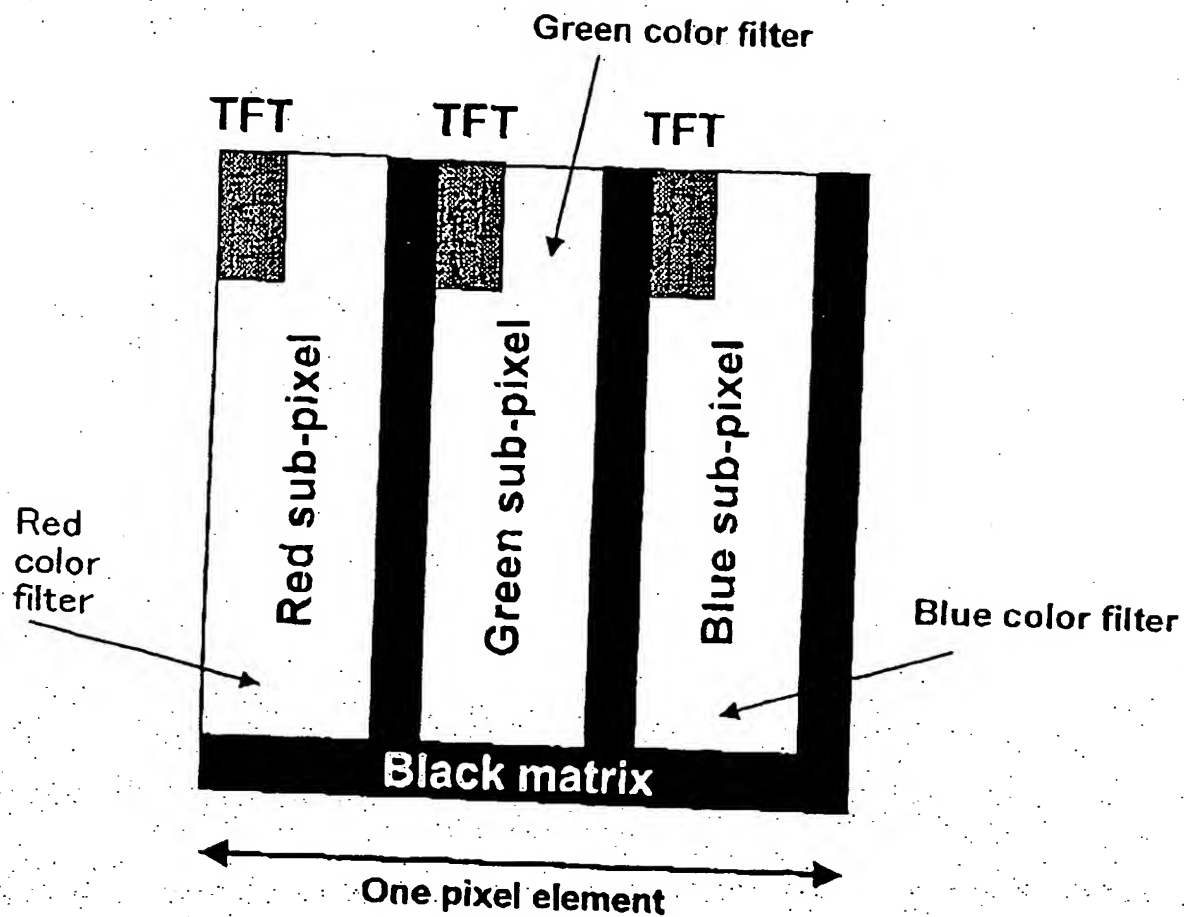


Fig. 1. Pixel structure of Conventional TFT-LCD with micro color filter

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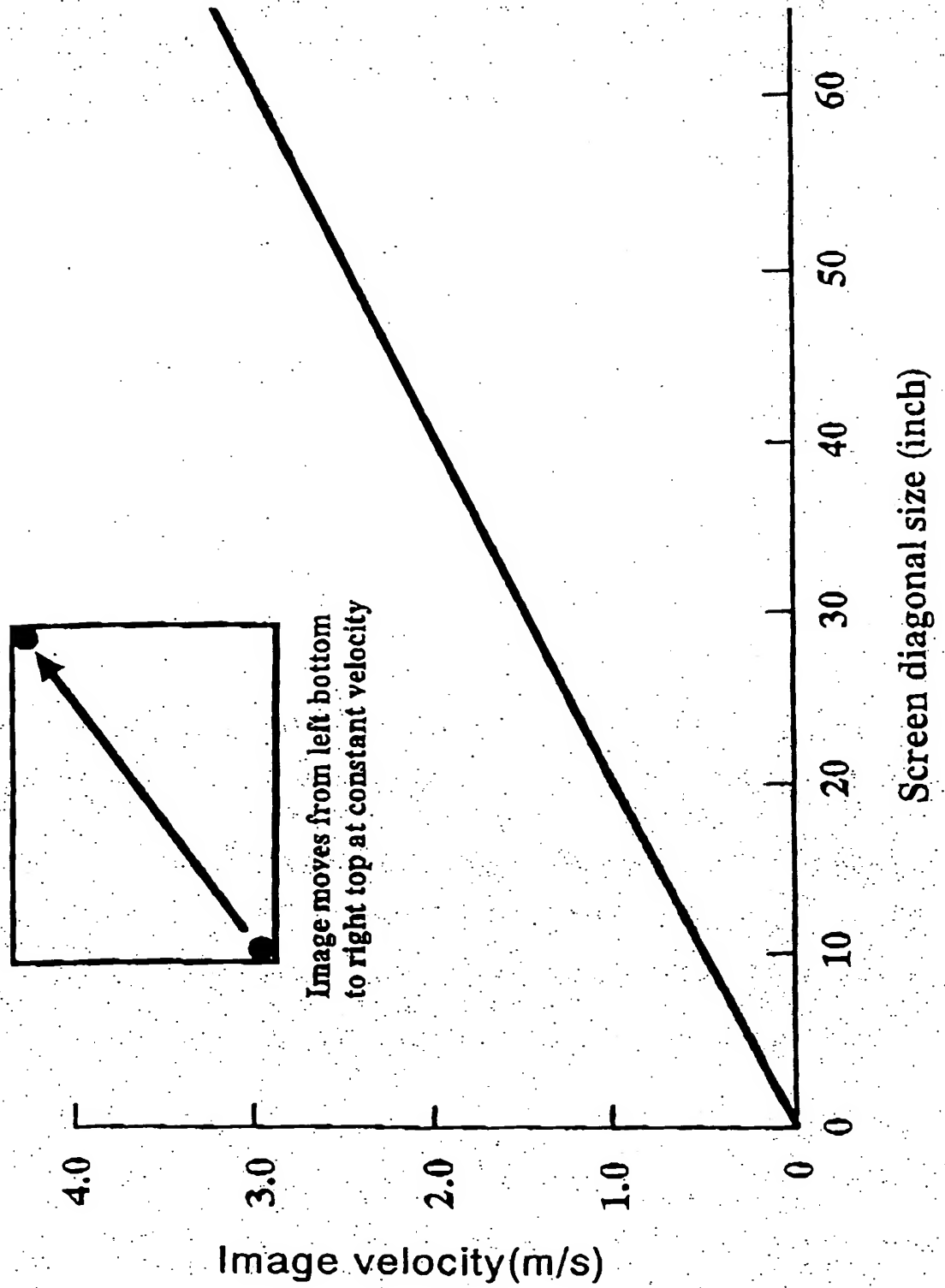


Fig. 2. Image velocity depending on screen diagonal size

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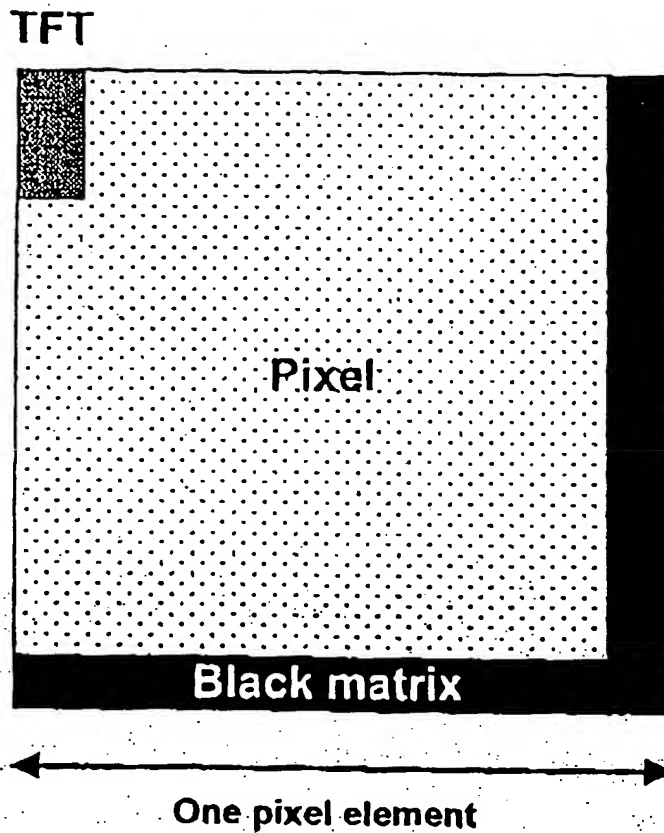


Fig. 3. Pixel structure of Field Sequential Color PS-V-FLCD

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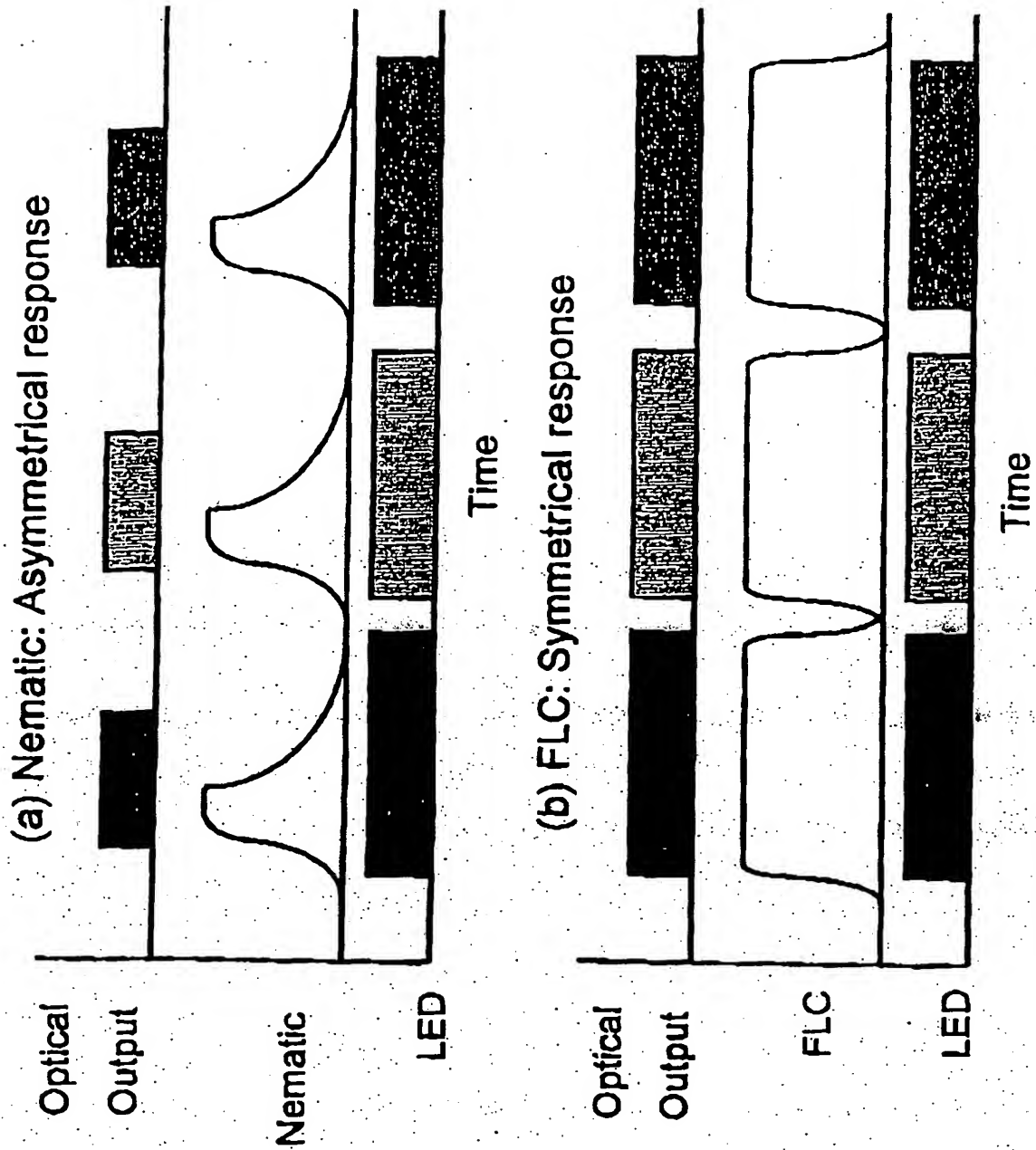


Fig. 4. Light throughput efficiency of field sequential color display

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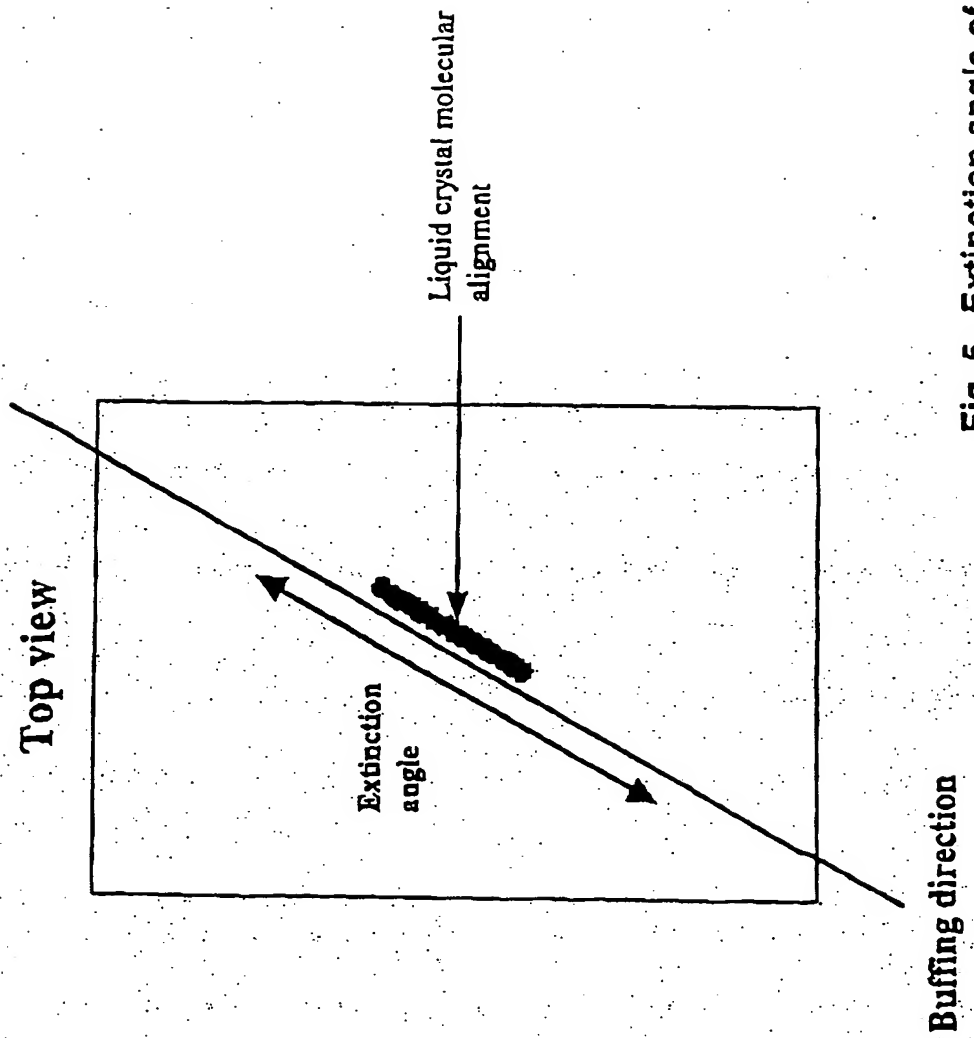


Fig. 5. Extinction angle of PS-V-FLCD panel

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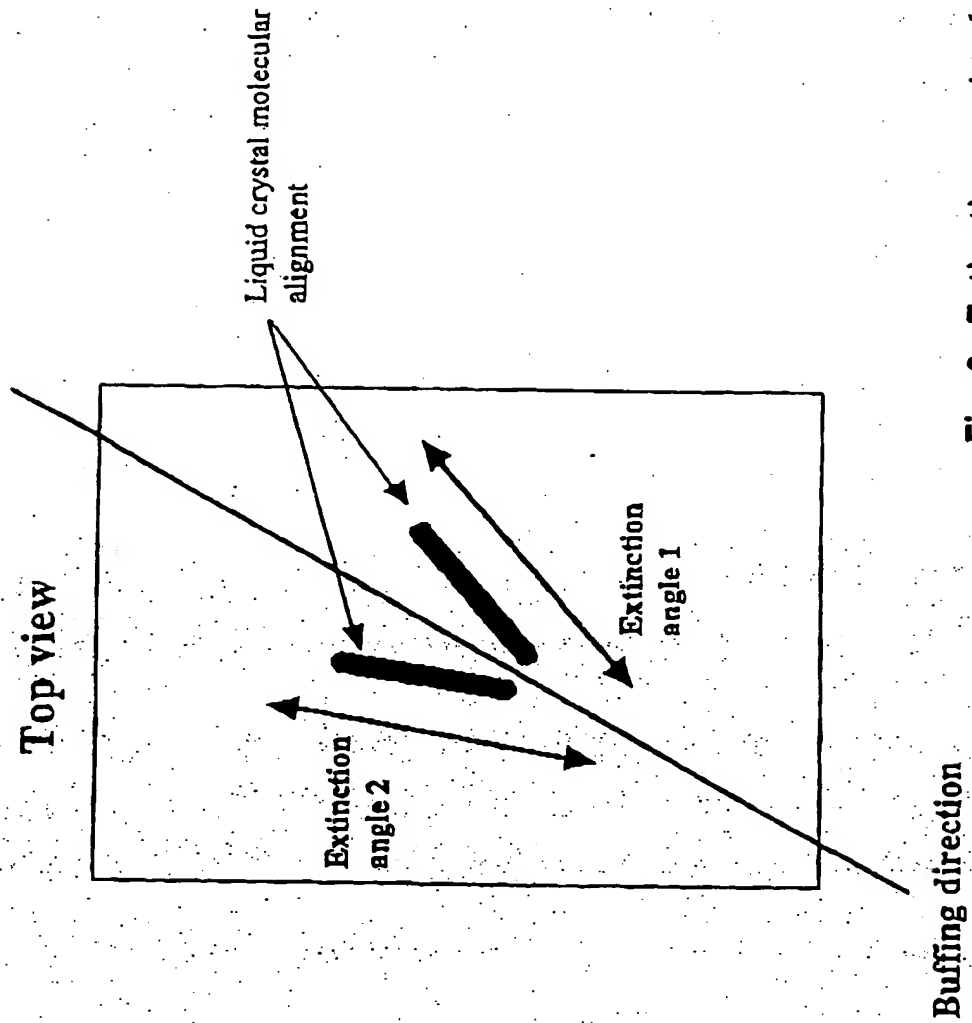
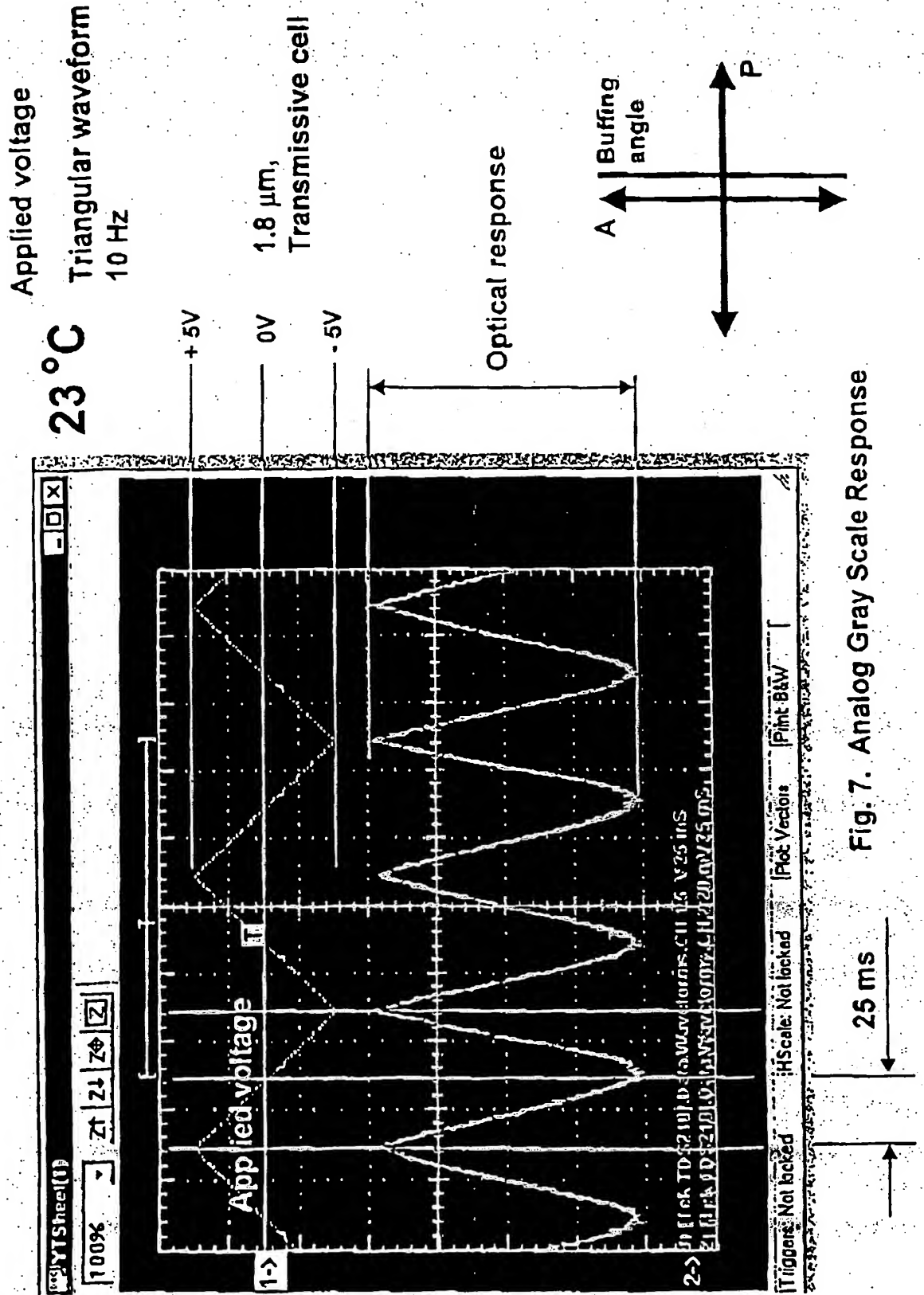


Fig. 6. Extinction angle of SSFLCD panel

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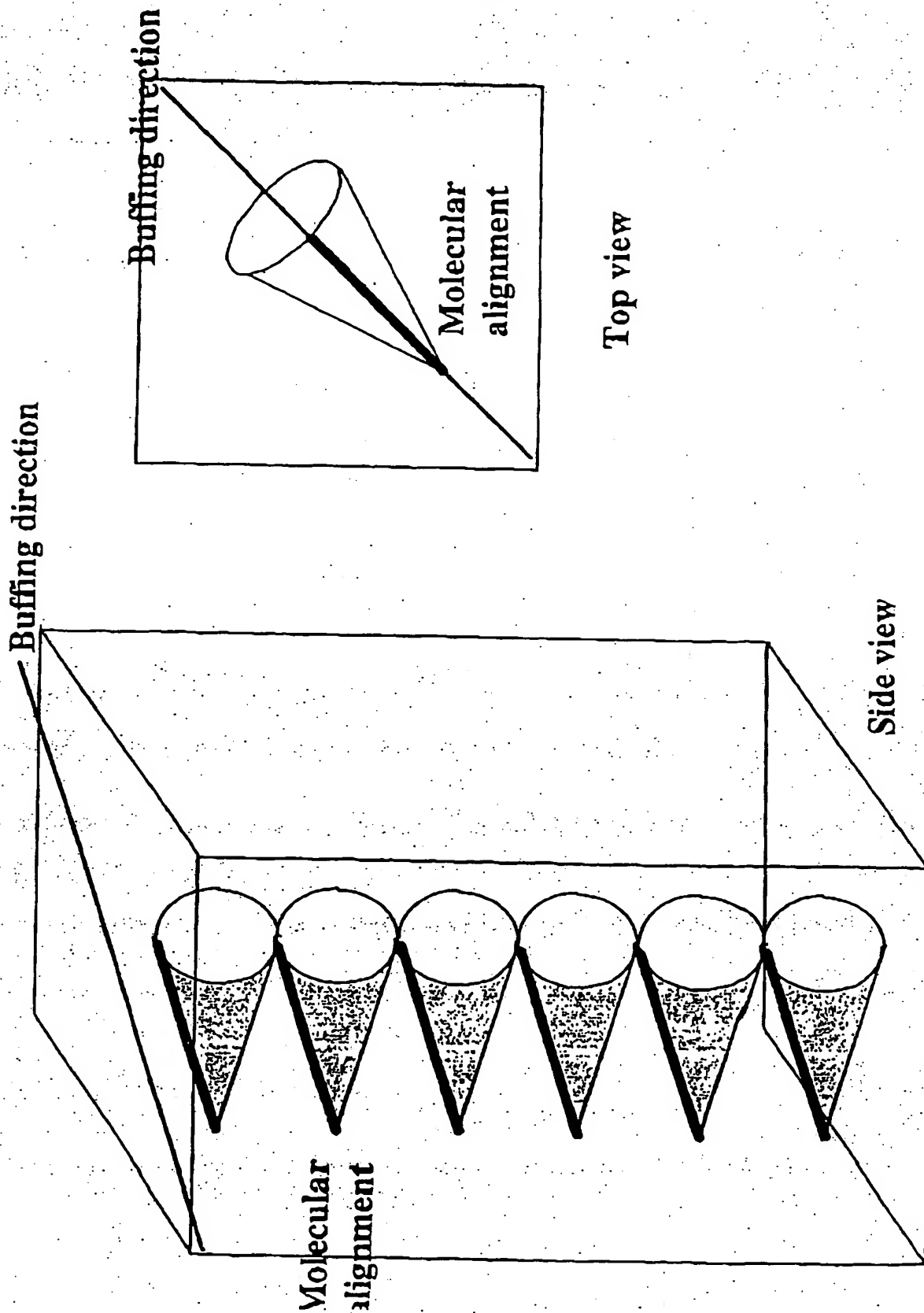


Fig. 8. Initial molecular alignment of this invention

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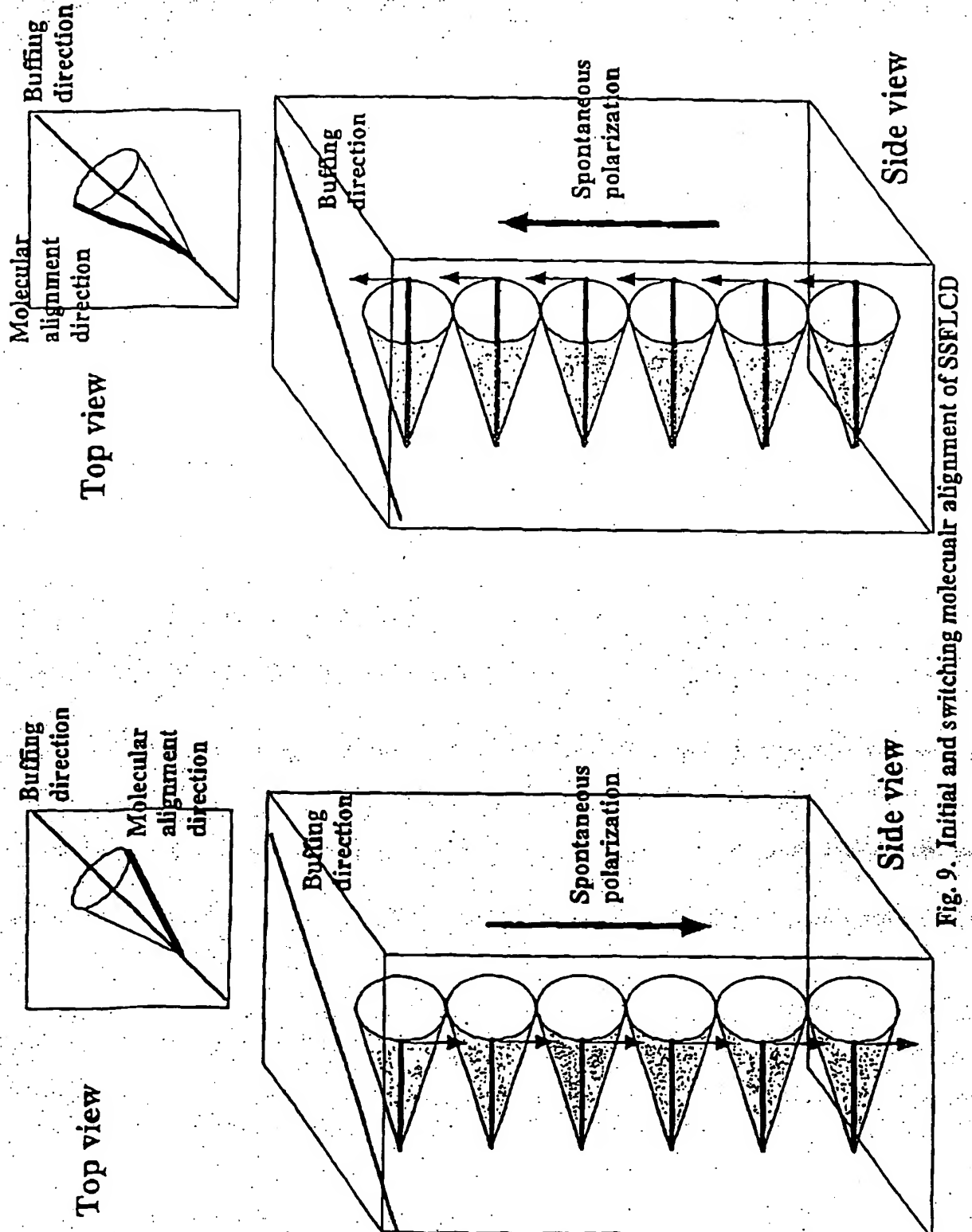


Fig. 9. Initial and switching molecular alignment of SSFLCD

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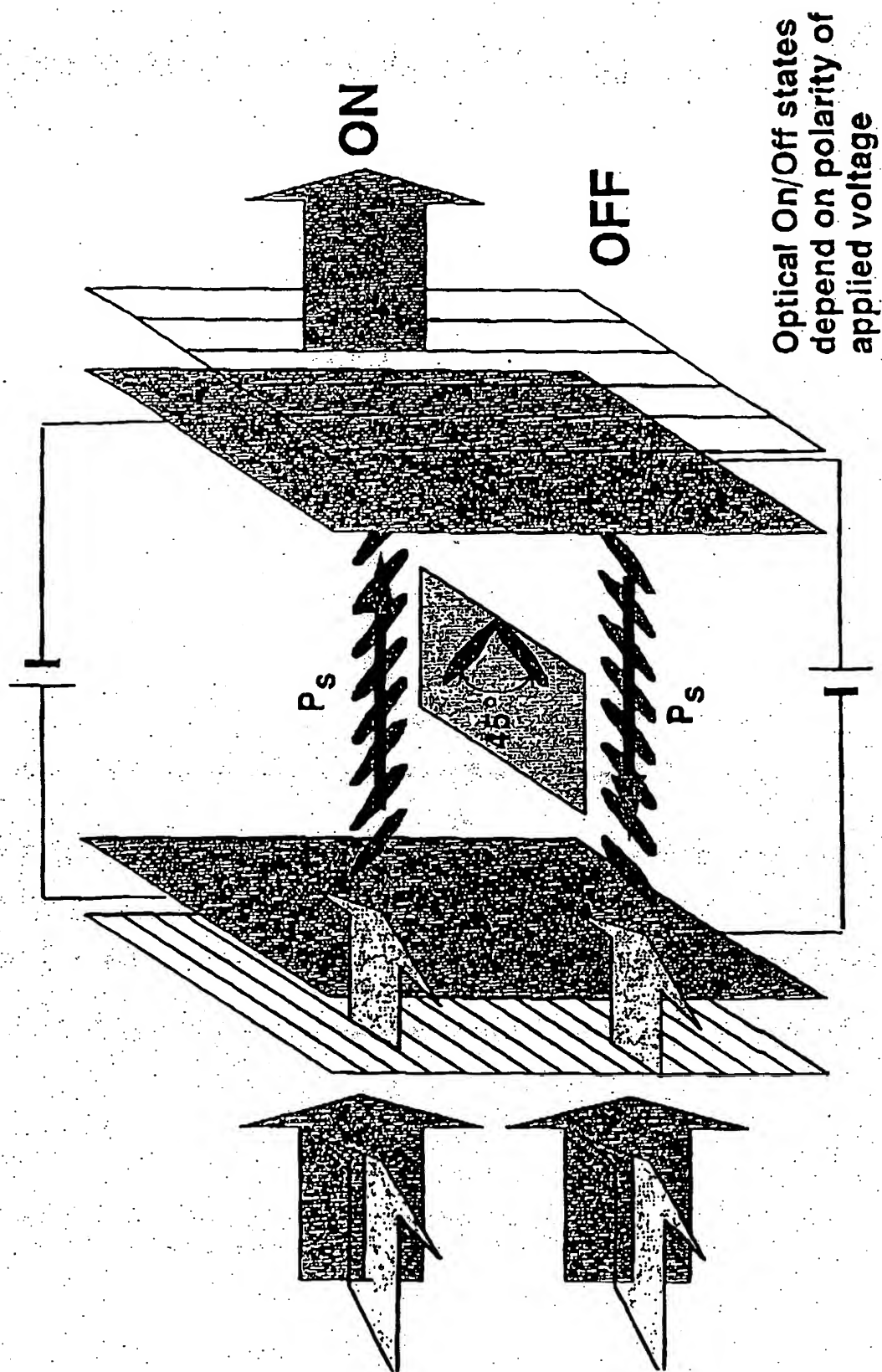


Fig. 10. Electro-Optical Effect of SSFLC displays

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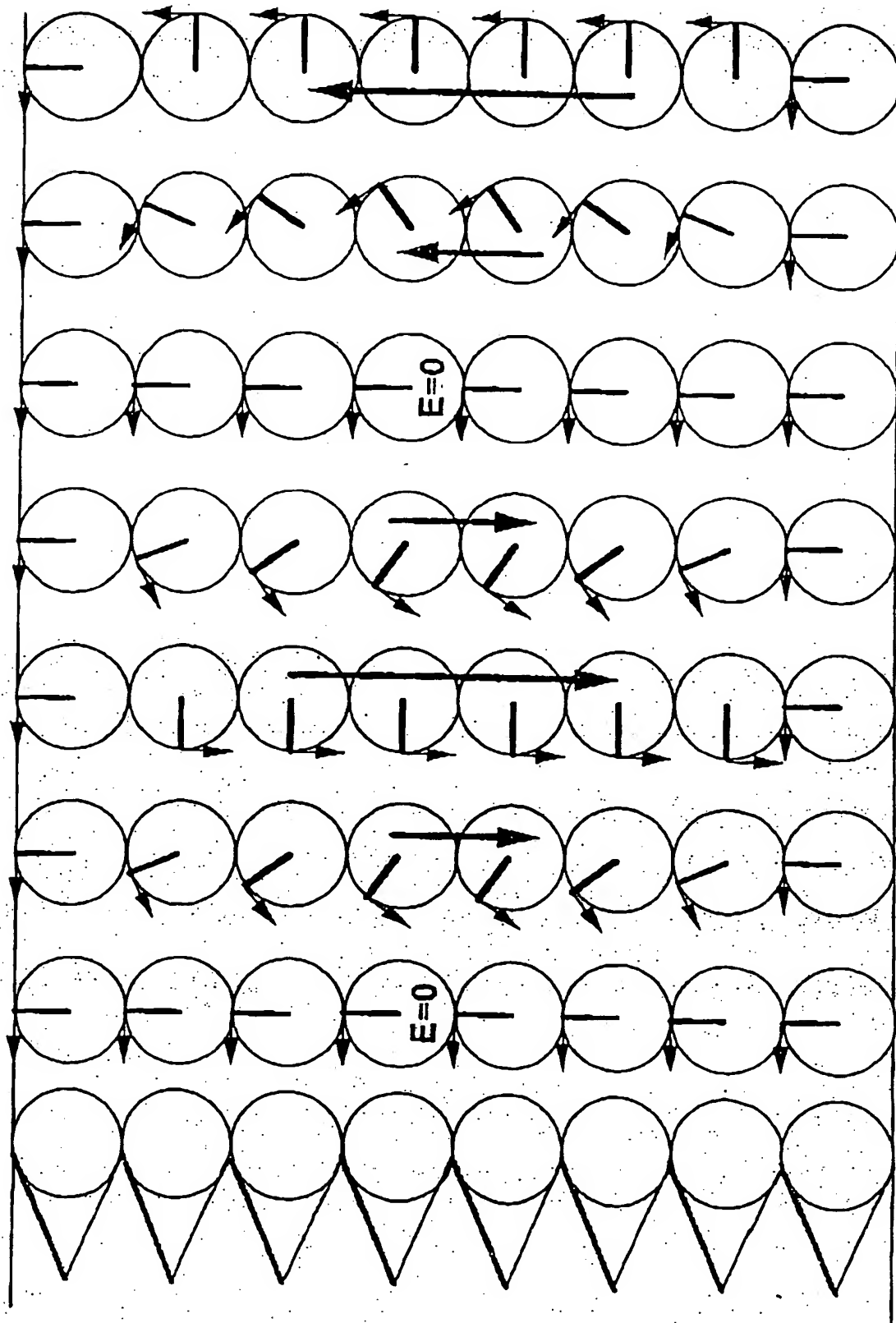


Fig. 11. (a) Model A: Uniform model

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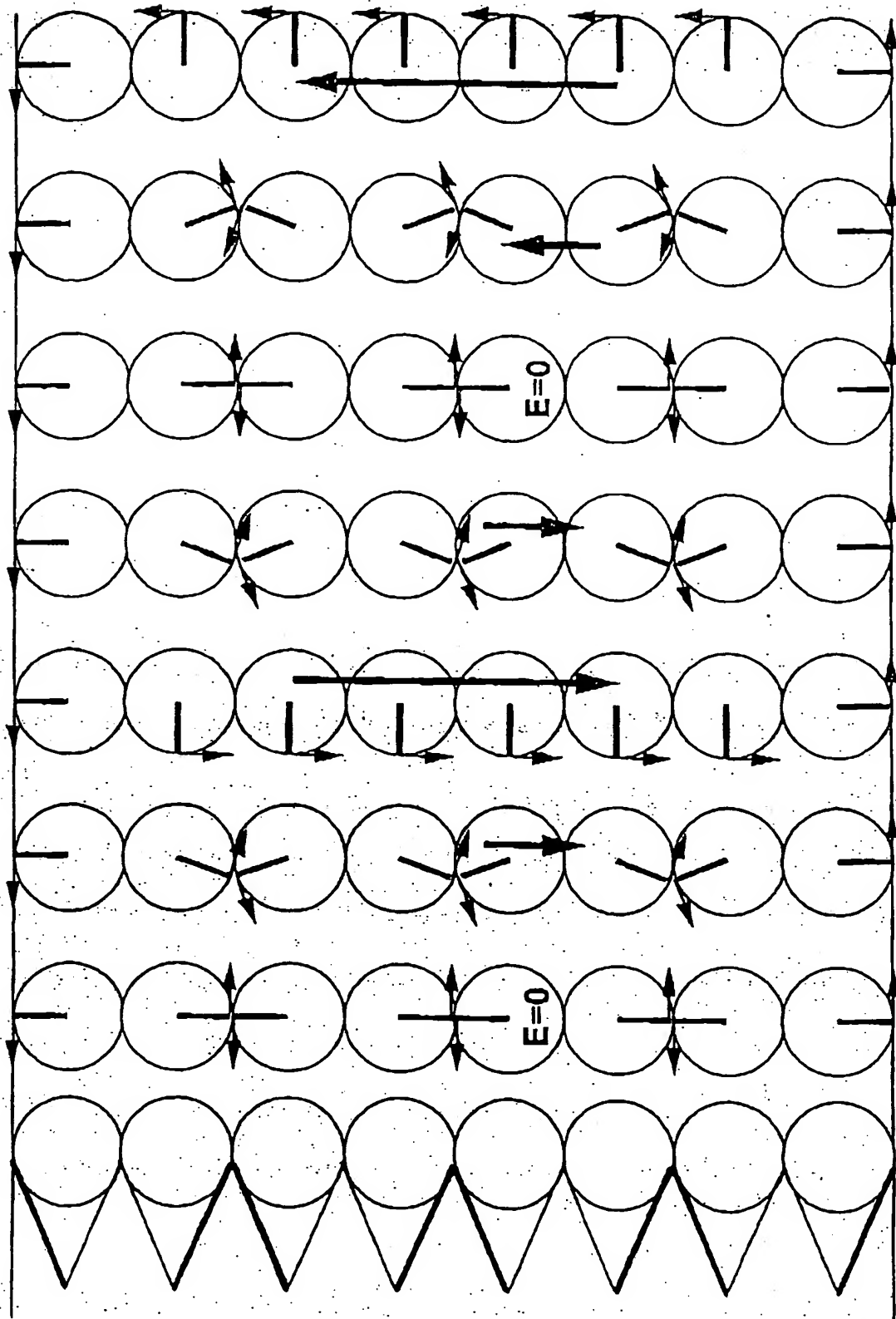


Fig. 11 (b) Model B: Internally Symmetric Model

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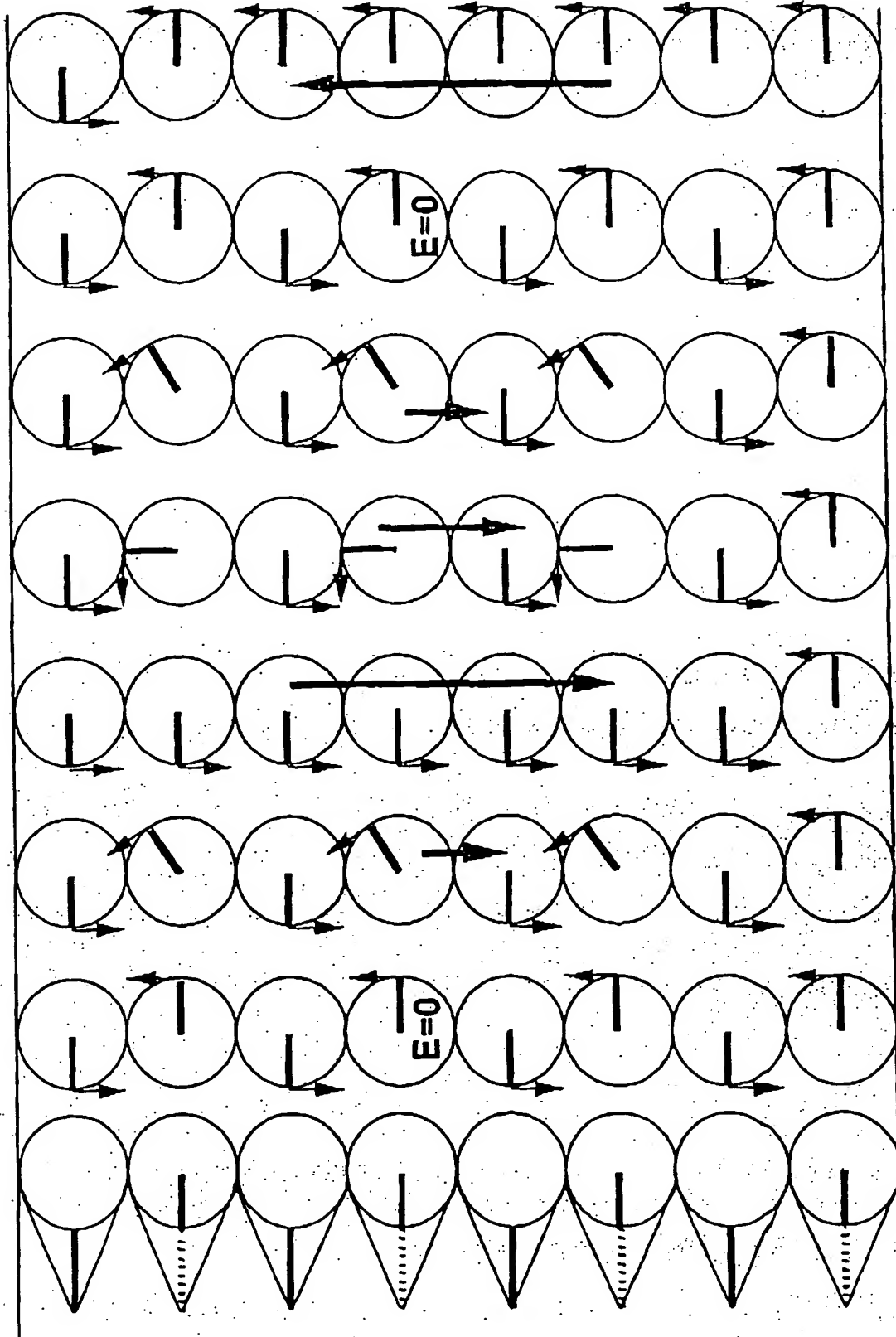
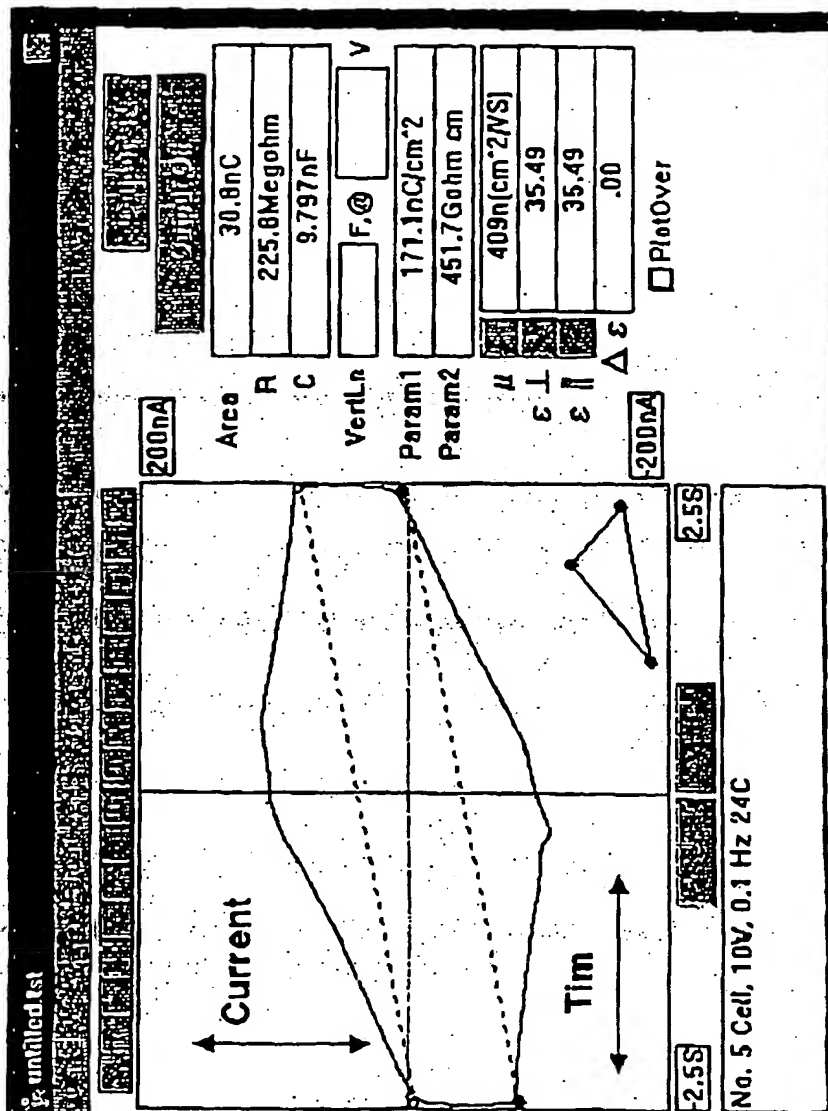


Fig. 11 (c) Model C: Total Polarization Cancellation Model

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Continuous change in
 current without showing
 peak represents no
 existence of spontaneous
 polarization in the direction
 parallel to applied electric
 field which is perpendicular
 to the substrates

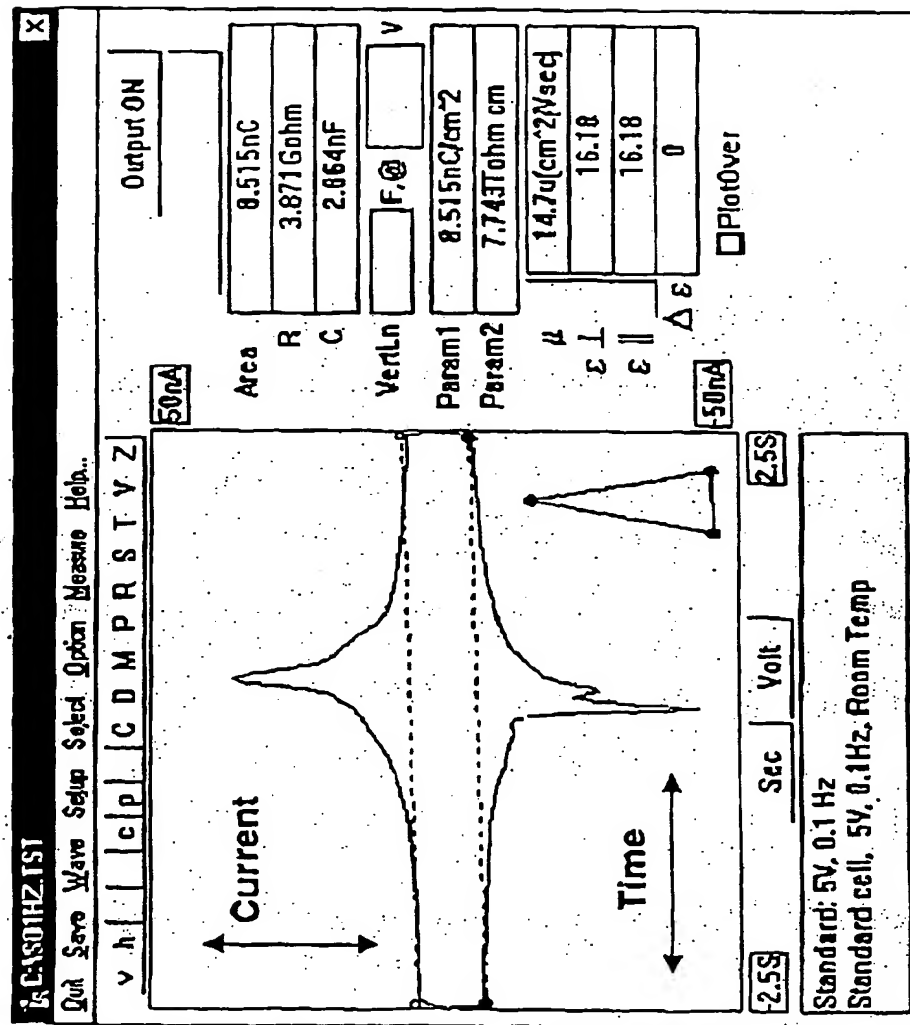
Polarization Shielded V-shaped FLCD



Measurement condition: 0.1 Hz, 10V Triangular waveform at 24C

Fig. 12. A direct evidence of no existence of spontaneous polarization parallel to the applied electric field in the invented panel

Conventional SSFLCD



Measurement condition: 0.1 Hz, 5V at 24C

Fig. 13. Polarization switching peak current of conventional SSFLCD panel

Peak current represents
binary polarization switching

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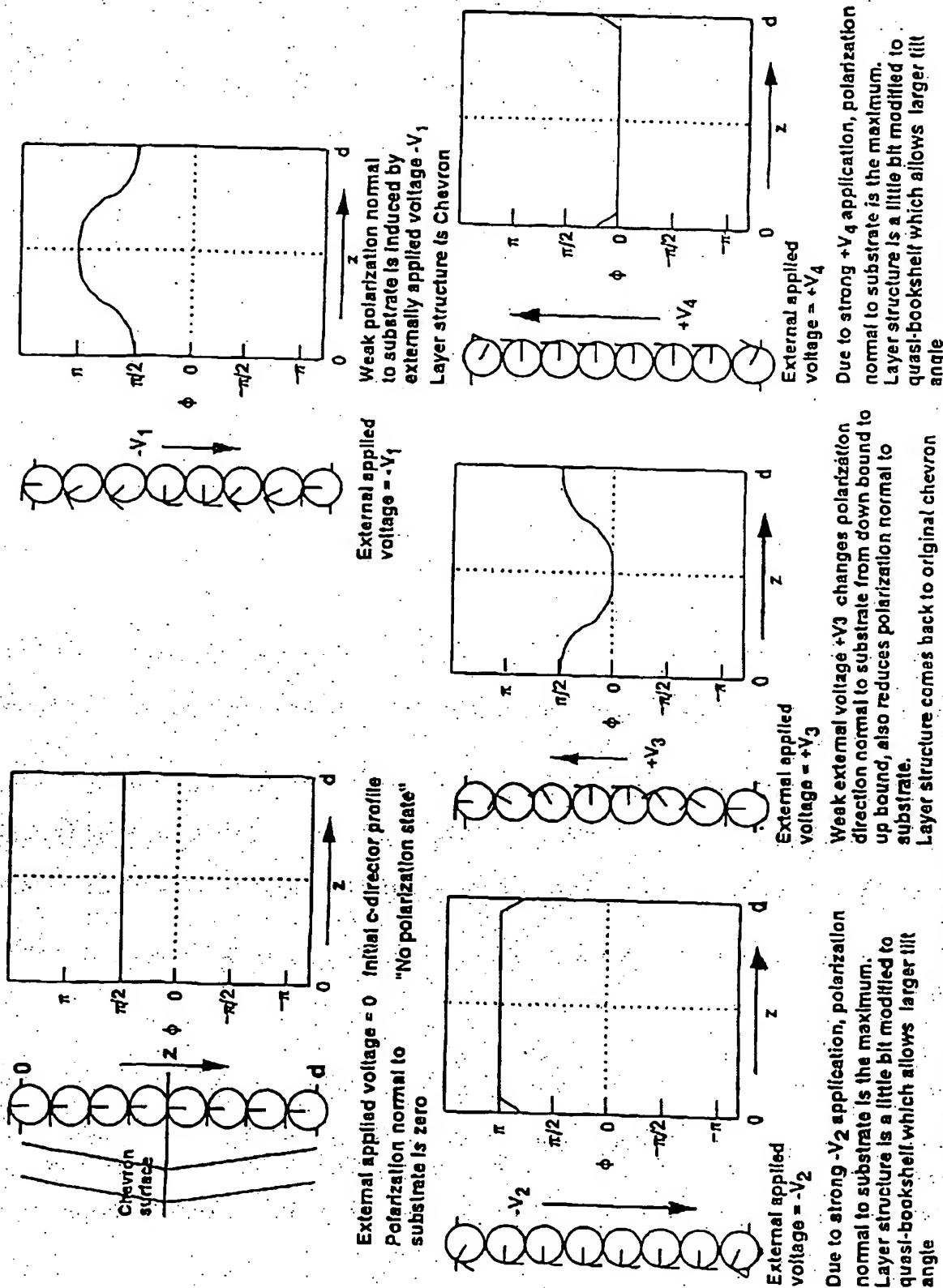


Fig. 14 (a) c-director profile of Polarization Shielded V-shape FLCD (PS-V-FLCD)

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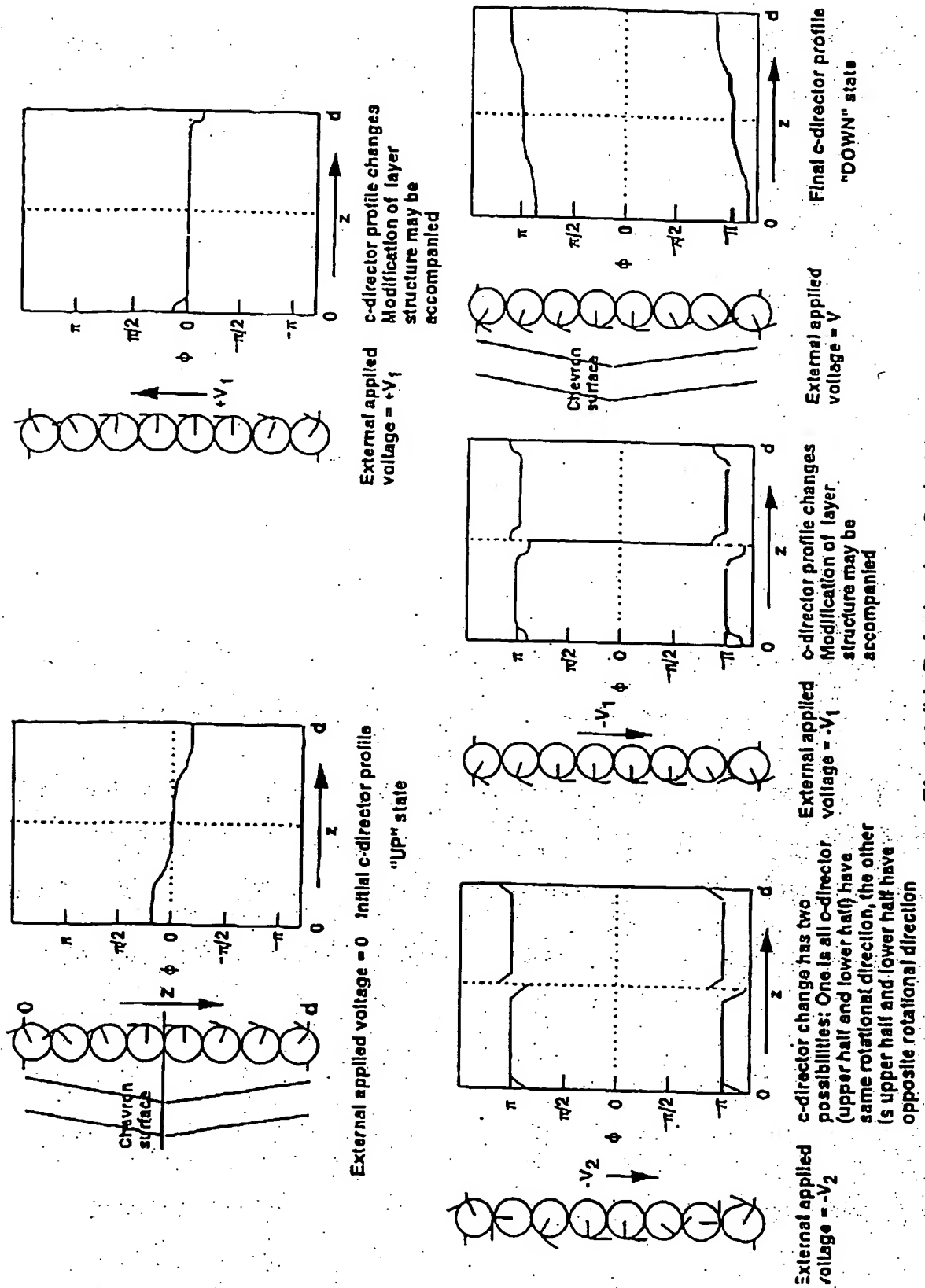


Fig. 14 (b) Polarization Switching process at SSFLCD

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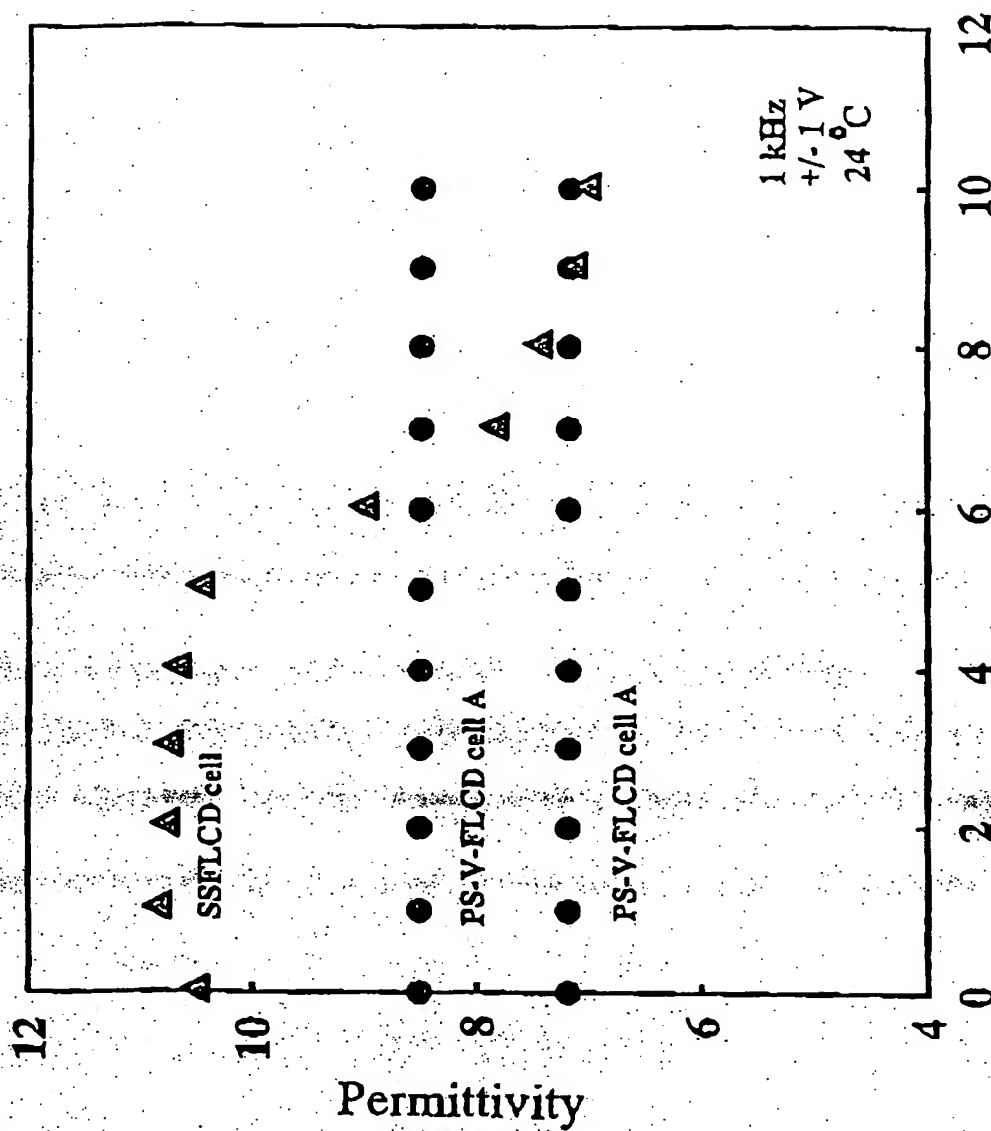


Fig. 15 Dielectric behavior of SSFLCD and PS-V-FLCD

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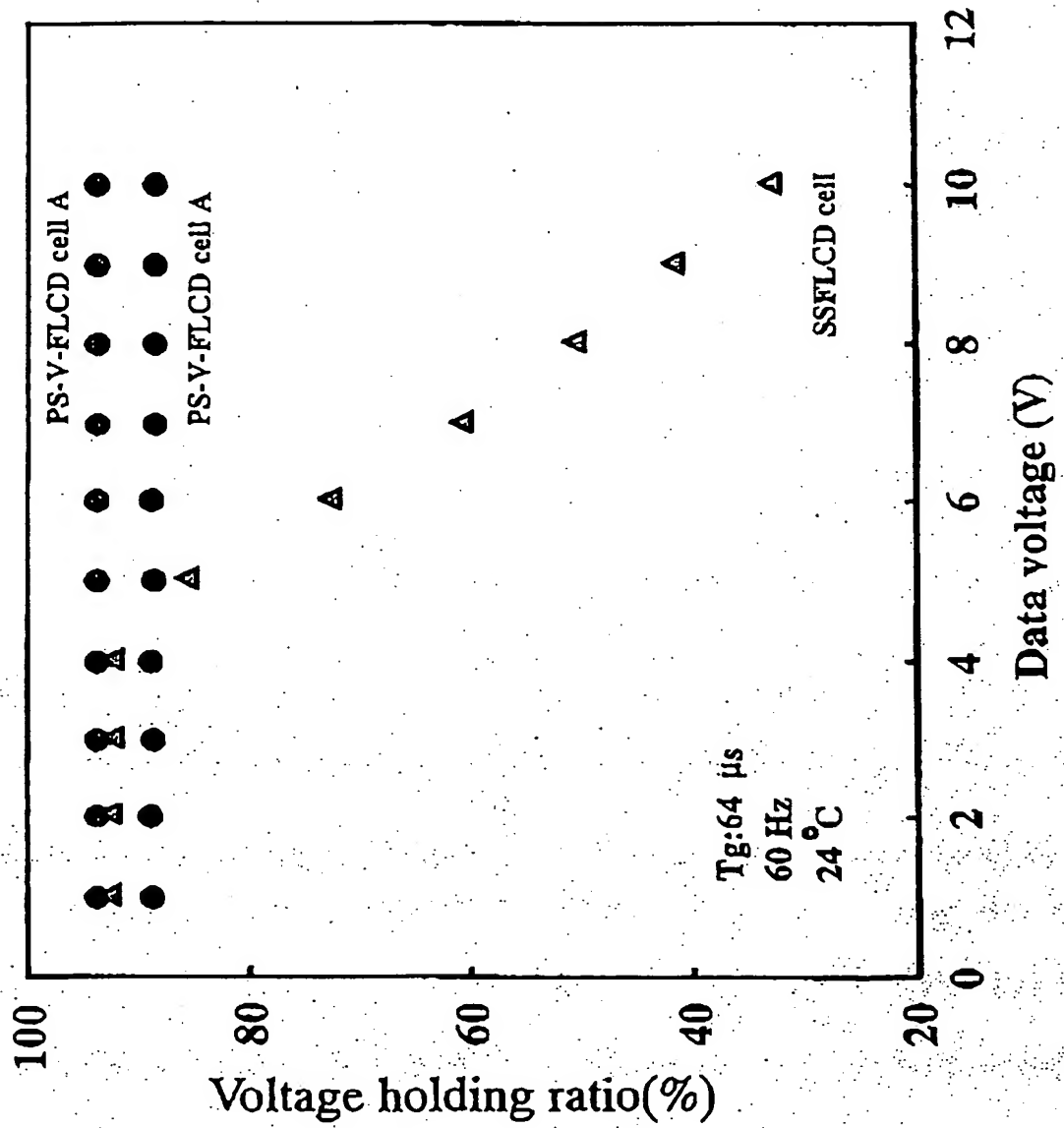


Fig. 16 Difference in VHR behavior between SSFLCD and PS-V-FLCD

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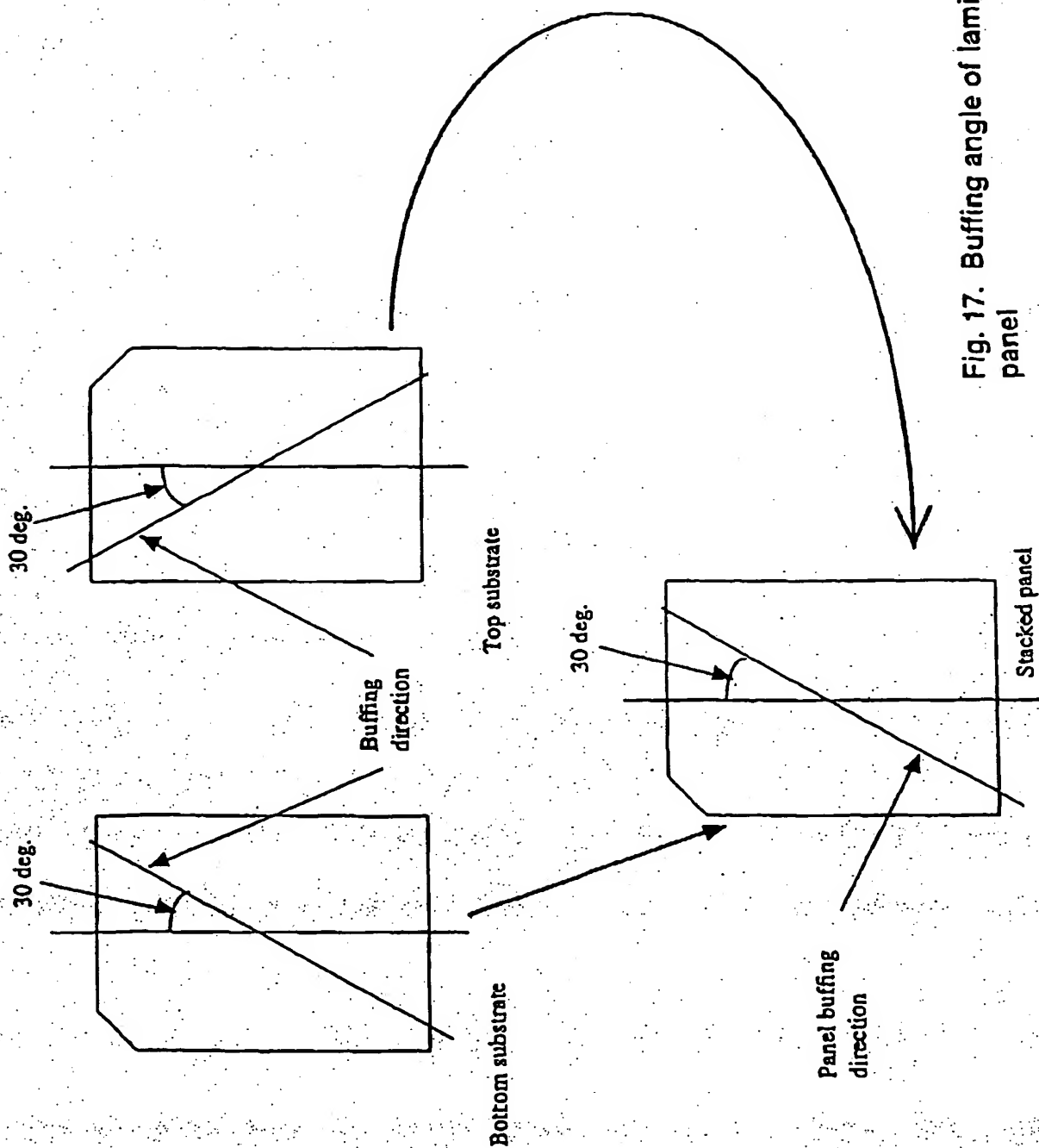


Fig. 17. Buffing angle of laminated panel

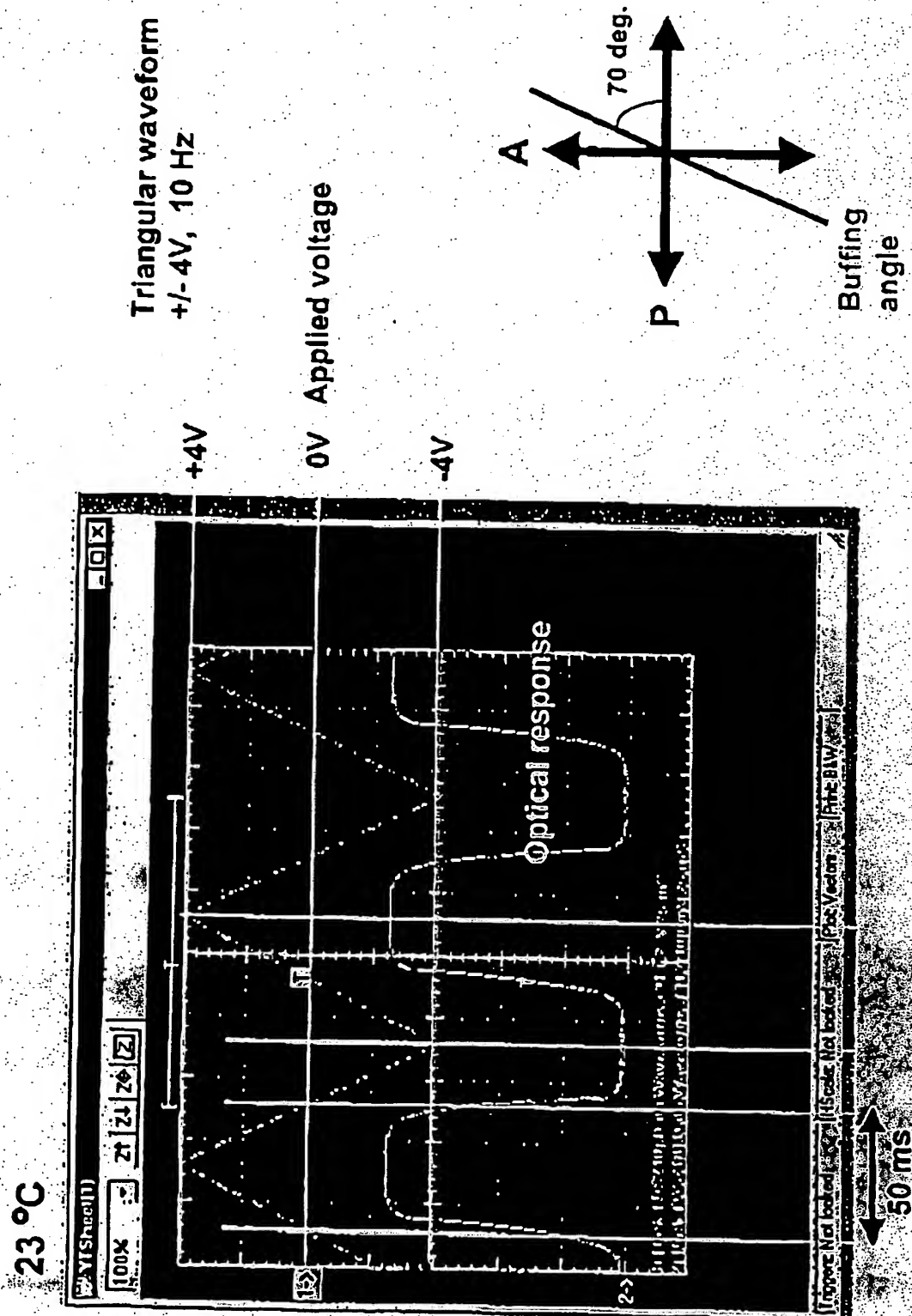


Fig. 18. Electro-optical response of the control example

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